

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 2003/002039

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 25/02 // H04B 7/005, H04B 7/06, H04L 27/26
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04B, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | <p>BARBAROSSA, S. et al. "Theoretical bounds on the estimation and prediction of multipath time-varying channels"</p> <p>In: IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 2000. ICASSP '00. PROCEEDINGS. 2000. Istanbul, Turkey 5-9 June 2000, Vol. 5, pages 2545-2548, INSPEC AN: 6770444, see chapter 1. Introduction and Abstract</p> <p>--</p> | 1-25 |

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

13 July 2004

Date of mailing of the international search report

15-07-2004

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer

Markus Stålb/EK
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 2003/002039

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | <p>VISOTSKY, E. et al. "Space-time transmit strategies and channel feedback generation for wireless fading channels"</p> <p>In: CONFERENCE RECORD OF THE THIRTY-FOURTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, 2000. Pacific Grove, CA, USA, 29 Oct - 01 Nov 2000, Vol. 2, pages 1593-1597, INSPEC AN: 7042318, see chapters 3. Analog Feedback and 4. Filter Designs</p> <p>--</p> | 1-25 |
| A | <p>GERLACH, D. et al. "Adaptive transmitting antenna arrays with feedback"</p> <p>In: IEEE SIGNAL PROCESSING LETTERS, October 1994, Vol 1, pages 150-152, ISSN: 1070-9908, INSPEC AN: 4801676, see chapters II Problem statement and assumpt. III Incorporation of feedback</p> <p>--</p> | 1-25 |
| A | <p>PAPANTONIOU, S.J. "A multipath channel model for mobile-radio communications"</p> <p>In: THIRD IEEE INTERNATIONAL SYMPOSIUM ON PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 1992. PROCEEDINGS, PIMRC '92, Boston, MA, USA, 19-21 Oct 1992, pages 92-97, INSPEC AN 4635478, see Abstract</p> <p>-- -----</p> | 1-25 |